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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.												
10/736,259	12/15/2003	Michael L. Kazar	SPIN-1 CONT	4663												
7590 Ansel M. Schwartz Attorney at Law Suite 304 201 N. Craig Street Pittsburgh, PA 15213		11/01/2007	<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">CHOI, WOO H</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2189</td><td></td></tr><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>11/01/2007</td><td>PAPER</td></tr></table>		EXAMINER		CHOI, WOO H		ART UNIT	PAPER NUMBER	2189		MAIL DATE	DELIVERY MODE	11/01/2007	PAPER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/736,259

Applicant(s)

KAZAR ET AL.

Examiner

Woo H. Choi

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) 29-52, 55-76 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 15-19, 25-28, 53 and 54 is/are rejected.
- 7) ☒ Claim(s) 7-14 and 20-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 – 28 and 53 – 54, drawn to a system with disks, a switch fabric, and network elements having a mapping function used to route requests via the switching fabric, classified in class 711, subclass 112.
 - II. Claims 29 – 52 and 55 – 76, drawn to a system with network elements, a switch element, and disk elements, where each network element insures each request from the network element is only executed once, classified in class 711, subclass 154.
2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as in a storage system that does not use the mapping function as claimed in I. A mapping function that See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the

present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

3. Newly submitted claims 29 – 52 and 55 – 76 are directed to an invention that is independent or distinct from the invention originally claimed for the reasons stated above.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 29 – 52 and 55 – 76 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose that the disk elements route the requests as claimed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 – 6, 16 – 19, 25 – 28, 53, and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Jiang *et al.* (US Patent No. 6,453,354 hereinafter “Jiang”).

8. With respect to claims 1, 16, 25, 27, 28, 53, and 54, Jiang discloses a system (figure 2) for responding to file system requests having file IDs comprising (col. 15 and 16, client command – server response table, see SMB_COM_READ), a volume identifier (Tid) specifying the file system being accessed, and R, an integer, specifying the file (Fid) within the file system being accessed comprising (figure 3):

D disk elements in which files are stored, where D is greater than or equal to 2 and is an integer (45);

a switching fabric (connections between the data movers 41 and 42 and disks 43 and 44) connected to the D disk elements to route requests to a corresponding disk element; and

N network elements (41, 42) connected to the switching fabric, each network element having a mapping function that for every value of V, specifies one or more elements from the set D that store the data specified by volume V, where N is greater than or equal to 2 and is an integer and N+D is greater than or equal to 4, which receives the requests and causes the switching fabric to route the requests by their file ID according to the mapping function (see col. 15 and 16, client command – server response table).

9. With respect to claims 2, and 17, see col. 15, SMB_COM_OPEN_ANDX.
10. With respect to claim 3 and 18, see figures 12 and 18.
11. With respect to claim 4, disk controllers are required for any functional disks.
12. With respect to claims 5, 6, 19 and 26, see col. 13, lines 34 – 41.

Terminal Disclaimer

13. The terminal disclaimer filed on May 19, 2006, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No. 6,671,773 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Amendment

13. Claim 17 has been amended to overcome a prior rejection under 35 U.S.C. 112, second paragraph. Corresponding rejection is withdrawn.

Response to Arguments

14. Applicant's arguments filed on August 28, 2006 have been fully considered but they are not persuasive. Applicant describes certain aspects of Jiang's disclosure and asserts that Jiang's data mover is not a switching fabric without explaining why the claimed fabric is patentably distinct from Jiang's data mover that routes/switches requests from clients to the file systems stored on disks. As conceded by Applicant "the data mover receives a file access request from the client" (Remarks, page 3, first paragraph) and routes the request to the file system that is associated with it or routes the request to the appropriate data mover so that the request can reach the proper file system. Jiang clearly discloses that data mover route/switch requests from clients to file systems on disks as shown in figures 1 – 4.

Applicant's assertion that the 'plain language that Jiang uses is "data mover computer" and not a switch or a switching fabric', amounts to an argument that putting different labels on devices that perform the same function makes them patentably distinct, because Jiang's data mover perform the same function as Applicant's claimed switching fabric – routing requests to a corresponding disk elements. Patentability lies in what the claimed devices do, not in the labels inventors choose to name the devices.

Allowable Subject Matter

15. Claims 7 – 15 and are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Claims 20 – 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2189

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (571) 272-4179. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Woo H. Choi
February 10, 2006